

# The Army SMCA Restructures for Success

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**"In the world of acquisition reform, ammunition and explosives remain an area where tight specifications and quality control remain as cornerstone business practices ... due to a defective item's ability to kill or injure a service person on the frontlines ... the SMCA Executor must work with a network of ammunition and explosives producers that continues to shrink and deal with inconsistent buying patterns by the services because of changing priorities, requirements or funding. The SMCA world is not your normal acquisition environment and is a true challenge for the organization charged with the executor mission."**

— COL Dave Underwood, Deputy Director of Logistics, Armament Enterprise Program Office, Air Armament Center

Soldiers with 2nd Battalion, 11th Field Artillery Regiment, 25th Infantry Division, fire an M119A2 Howitzer during a harassment and interdiction fire exercise at Forward Observing Base Warrior in Kirkuk, Iraq, June 2, 2004. (U.S. Army photo by PFC Elizabeth Erste, 55th Signal Company.)





The AC-130 gunship's primary missions are close air support (CAS), air interdiction and force protection. CAS missions are typically troops in contact, convoy escort and urban operations. Air interdiction missions are conducted against preplanned targets or targets of opportunity. Force protection missions include air base defense and facilities defense. (U.S. Air Force (USAF) photo.)

The Army's Single Manager for Conventional Ammunition (SMCA) is charged with the acquisition and production management of more than 166 different ammunition types for all military services including the Army, Air Force, Marine Corps and Navy. The total procurement effort cost more than \$1.9 billion in procurement dollars in FY04. The logistics management for more than 2 billion munitions items purchased was valued at \$22.9 billion. Operations and maintenance costs were approximately \$280 million and consumed more than 1,000 man-years of effort. By any measure, ammunition procurement and logistics is big business.

In one form or another, the SMCA has been in existence since the mid-1970s. It began as an outgrowth of a 1973 General Accounting Office (GAO) report and was created to resolve congressional concerns about the

efficiency of ammunition procurement, production and logistics. At the time, each military service had separate divisions for operations and infrastructure.

The SMCA's objectives have remained the same since its inception was defined in *DOD Directive (DoDD) 5160.65, Single Manager for Conventional Ammunition*, — "Achieve the highest possible degree of efficiency and effectiveness in DOD operations required to acquire top quality conventional ammunition for U.S. forces and integrate wholesale conventional ammunition logistics functions of the military departments to the maximum extent practicable."

The directive assigned the Army as the executive agent to carry out this mission. To ensure its success, each service transferred its government-owned production base to the Army, making it a long-term mission. The directive divides conventional ammunition into two categories: service-retained and SMCA-managed items. Service-retained items include guided munitions such as projectiles,



This 105mm ammo was to be used for an M119A1 105mm Lightweight Towed Howitzer assigned to A Battery, 2-319 Airborne Field Artillery Regiment. The regiment deployed from Fort Bragg, NC, to Baghdad International Airport, Iraq, in support of *Operation Iraqi Freedom (OIF)*. (USAF photo by MSG Robert R. Hargreaves Jr.)

rockets and missiles as well as service-unique items such as torpedoes and chaff. Even service-retained items can be “transitioned” to the SMCA through a process where the developing service hands off the item to the SMCA for management. SMCA-managed items include nearly everything else that is defined as conventional ammunition.

The SMCA has 16 mission functions that are spelled out in *DoDD 5160.68, Single Manager for Conventional*

*Ammunition*, of March 1998. They range from development to demilitarization, acquisition to logistics and transportation and maintenance to quality assurance. In other words, SCMA provides soup-to-nuts life-cycle management for a wide range of ammunition that supports our military forces’ efforts around the globe.

### Organized for Success

SMCA was restructured in the late 1990s in response to new GAO recommendations that SMCA:

- Manage ammunition as a major program.
- Consolidate under a program executive office (PEO) structure.
- Convert government-owned production assets to the private sector.
- Apply acquisition reforms.

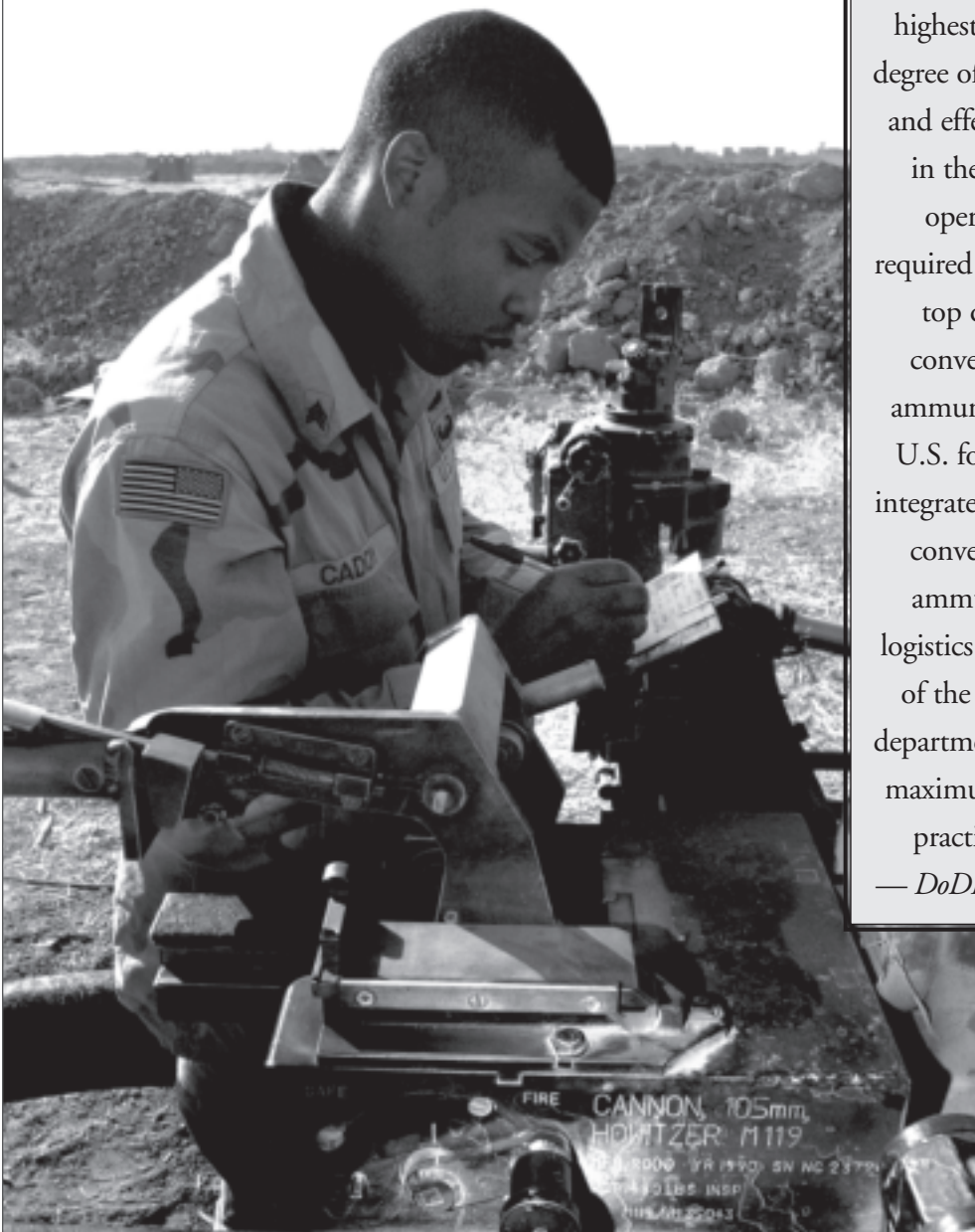
The changes were made and improvements to the operation continue today. In October 2001, the Army stood up PEO Ammunition (Ammo). By December 2002, the Army reached agreement on delineating responsibility for the SMCA mission functions, which were

then designated to either PEO Ammo or to the Joint Munitions Command (JMC). In April 2003, PEO Ammo was designated as the SMCA Executor charged with integrating and executing SMCA functions, making PEO Ammo ultimately responsible for SMCA’s success or failure.

It didn’t take long for PEO Ammo and JMC to change the way that SMCA did business. Using a Lean Manufacturing/Six Sigma strategy, the PEO; U.S. Army Research, Development and Engineering Center (ARDEC); and JMC began developing an ammunition enterprise approach to manage the SMCA. This delineated responsibility and defined enterprise-level process maps. The enterprise also

embarked on improving command relationships through a series of senior-level off-site meetings that resulted in an enterprise Memorandum of Understanding (MOU) signed in January 2004. The MOU is a capstone document that defines how the SMCA operates.

SGT Elijah Caddy records coordinates for a test fire of an M119A1 105mm Lightweight Towed Howitzer. Caddy is assigned to A Battery, 2-319 Airborne Field Artillery Regiment, deployed from Fort Bragg. (USAF photo by MSG Robert R. Hargreaves Jr.)



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— *DoDD 5160.65*



To improve its customer focus, PEO Ammo also established an SMCA Procurement Steering Council in October 2003. The Council gives the services a voice in the SMCA acquisition process and gathers the military services' requirements and acquisition organizations to engage the SMCA project managers (PMs). It's an opportunity to address SMCA issues and to improve critical business processes.

The PEO uses a family approach to managing the SMCA mission. For example, PM Maneuver Ammunition Systems (MAS), which has always had program management responsibility for Army small and medium caliber systems, now manages Air Force and Navy service-unique small and medium caliber ammunition. PM MAS executes the acquisition process for the services, but each service retains program management responsibility. PMs can now develop far more comprehensive acquisition plans/strategies and consolidate all service item procurements when it makes sense to do so. Items that do not fit into PM MAS, PM Combat Ammunition

Systems or PM Close Combat Systems families belong to PM Joint Services (PM JS). Therefore, PM JS is responsible for items such as Air Force and Navy bombs.

One constant in the restructuring has been the Office of the Executive Director for Conventional Ammunition (OEDCA), which acts as an ombudsman for SMCA. While change has not been easy, OEDCA has been instrumental in reassuring the services that the changes will be beneficial in the long run.

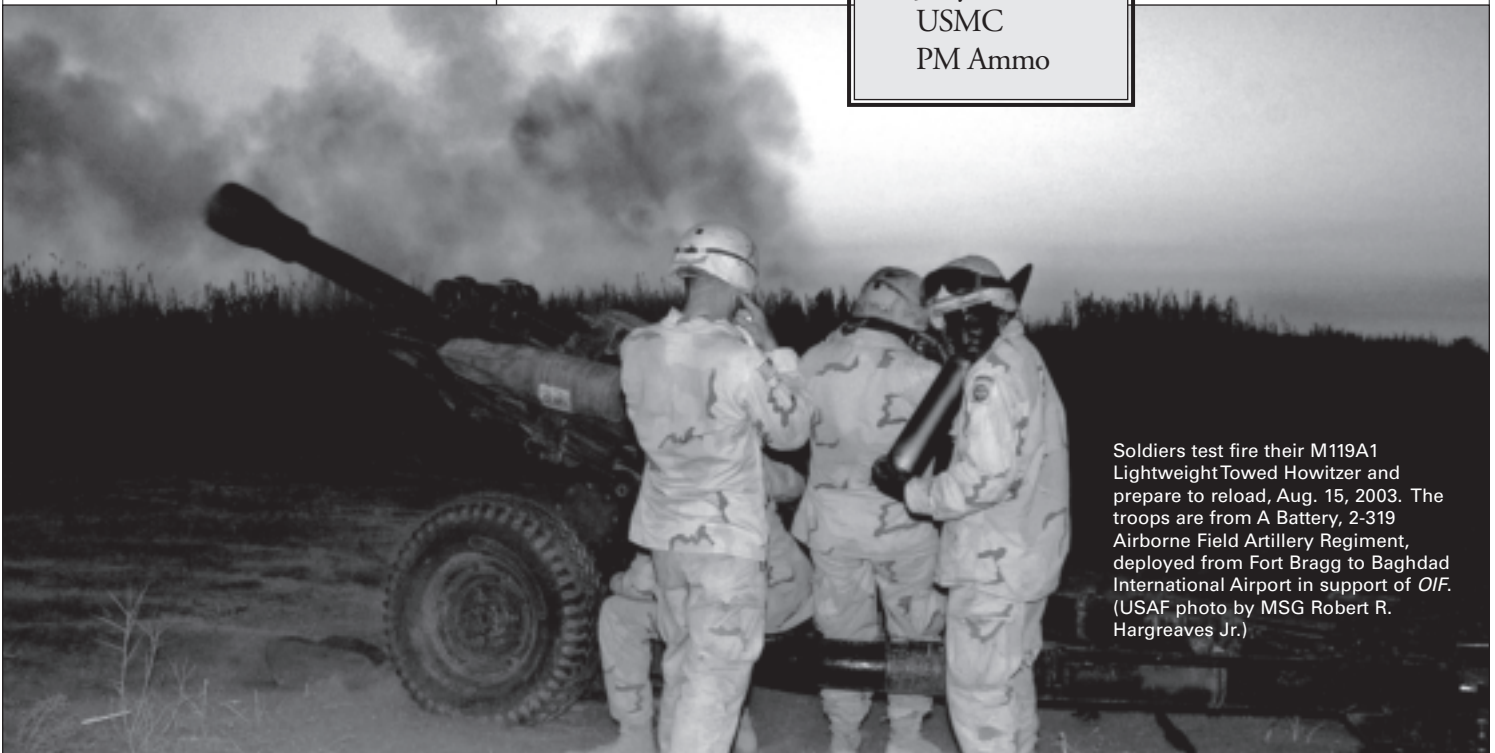
Understanding the other service customers has presented its own challenges. Each service has a different approach to ammunition management. For example, the Navy and Air Force consider

ammunition in production a logistics function. This is not the case with the Army. Most Air Force ammunition requirements come through the Air Force Munitions Command's Ogden Air Logistics Center. Additional key players exist for the other services. The most centralized is the U.S. Marine Corps (USMC) — with PM Ammo being responsible for all surface ammunition. Navy management is divided between air and sea, with PM 4 handling Navy surface ammunition requirements and PMA 201 and 242 handling air-launched munitions.

SMCA's responsibilities extend beyond ammunition production. JMC now leads SMCA logistics functions including transportation, storage, inventory management and

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— Jerry Mazza  
USMC  
PM Ammo



Soldiers test fire their M119A1 Lightweight Towed Howitzer and prepare to reload, Aug. 15, 2003. The troops are from A Battery, 2-319 Airborne Field Artillery Regiment, deployed from Fort Bragg to Baghdad International Airport in support of OIF. (USAF photo by MSG Robert R. Hargreaves Jr.)

outloading. *Operation Iraqi Freedom* has given JMC a lot of experience in recent years.

## Customer Feedback

From a customer's perspective, Jerry Mazza, Marine Corps Systems Command, PM Ammo, stated that, "The stand-up of any organization brings some level of anxiety. As a significant customer of PEO Ammo, I felt some of the growing pains early on. Since 2002, we've seen major improvement in many forums," he continued. "Communications have increased tremendously. I have witnessed a sincere good-faith effort in support of the Joint customer base. While there is still work to do, I believe PEO Ammo is on the right track to becoming a high-performing, efficient, team-based and responsive organization in playing a critical role in munitions research, development and life-cycle management," Mazza remarked.

Underwood, another customer, said, "With the assignment of the SMCA Executor mission to the Army's PEO Ammo, a new evolution in Joint service common munitions procurement is being observed. With the full spectrum of acquisition expertise now available, the Air Force approached PEO Ammo to form a 'Tiger Team' to examine systems engineering and configuration control issues in medium caliber and 105mm cartridges. The team's findings and solutions appear to be producing positive results and their implementation is going to benefit all services, not just the Air Force," he continued. "The Six Sigma culture is really having a

positive impact for government and industry according to many speakers at the recent National Defense Industrial Association Munitions Executive Summit. Its use will benefit every service person placed in harm's way."

"Another positive indicator of what PEO Ammo brings to the Joint ammunition world is our experience with developing the FMU-160/B Electronic Proximity fuze. This fuze is used with the 105mm High Fragment Cartridge on Air Force Special Operations gunships. During testing, we fired 225 FMU-160/Bs during 9 gunship missions. Every fuze functioned as de-

signed within a foot of 15 feet above the target. This capability increase is perfectly timed for front-line needs in the global war on terrorism," Underwood explained. "The end result of our Joint venture with PEO Ammo to produce the FMU-160/B and 105mm High Fragment Cartridge yielded a huge leap in lethality, which can be used against hostile personnel and soft targets."

In addition, PM JS conducted a survey over the last 2 years. If the summarized comments from FY03 serve as a baseline, the FY04 survey results

show a significant improvement with 94 percent of the responses showing some improvement and 64 percent of the improvement categorized as "better." The Navy Deputy for PM 4 said he was impressed with the new mindset and felt they were being heard. The USMC said there has been "significant improvement in key areas," and it is impressed with Tiger Team results. In

addition to positive feedback, customers also identified more opportunities to excel. Those opportunities are already being explored.

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